In the Claims:

Please amend Claim 1 as follows.

1.   (Amended) A method for providing a virtual environment for simulating the arrangement of a plurality of parts into an assembly, comprising:

(a)   creating a model in a design environment for each part, each model having a geometry that corresponds to a part;

(b)   translating each model into a virtual part in the virtual environment, the design environment being integrated with the virtual environment; and

(c)   enabling each virtual part to be positioned in an assembly within the virtual environment, wherein the positioning of each virtual part enables a constrained motion simulation to be performed for the arrangement of the plurality of parts into the assembly, wherein the constrained motion simulation limits the simulated motion of at least one virtual part to an allowed direction.

Please add the following new Claims 32-36:

32.   (New) A method for providing a virtual environment for simulating the arrangement of a plurality of parts into an assembly, comprising:

(a)   creating a model in a design environment for each part, each model having a geometry that corresponds to a part;

(b)   translating each model into a virtual part in the virtual environment, the design environment being integrated with the virtual environment;

(c)   enabling each virtual part to be positioned in an assembly within the virtual environment, wherein the positioning of each virtual part enables a simulation to be performed for the arrangement of the plurality of parts into the assembly, wherein the simulation

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processes constraint information for limiting the motion of at least one virtual part associated

A4 with the constraint information;

(d) comparing the constraint information with a predetermined constraint information set, and

(e) limiting the motion of the virtual part associated with the constraint information to only move in a direction defined in the predetermined constraint information.

33. (New) The method of Claim 32, further comprising, enabling the simulation to be modified, a modification enabling another simulation to be performed, and when the modification causes a change in the virtual part, causing the corresponding model to automatically include the change to the virtual part.

34. (New) The method of Claim 32, further comprising, receiving a user controlled command by a virtual reality peripheral device for arranging of the plurality of parts into the assembly.

35. (New) The method of Claim 32, wherein the virtual environment is formed by a generation of three-dimensional views.

36. (New) The method of Claim 32, further comprising, providing a menu display in the virtual environment, the menu display configured to receive commands from a user by the use of a virtual reality peripheral device.

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